CHAPTER - I

INTRODUCTION
Several programmes have been initiated to bring about qualitative change in rural India in a phased manner since independence. These programmes aim to improve socio-economic conditions of the rural people. Amongst several developmental programmes, agriculture has been given top priority. Besides, breakthrough in agricultural technology has opened new vistas for desirable socio-economic transformation.

This task can be achieved only when people are stimulated and motivated to accept and adopt newer techniques to improve their living standards.

Communication channels play pivotal role in disseminating the information. But when the bulk of population is illiterate and inaccessible to modern means of communication, the challenge is all the more difficult. In this situation, mass media like radio can play a significant role in disseminating developmental messages.
The present day world is characterized by multi-media explosion. The mass media now possess cafeteria where a person can exercise wide options. Of late, the media needs of a person have also expanded (Chandra Mouli 1987). Till recently, the supremacy of radio as a mass medium was absolute in developing countries. With the advent of television, enhanced by satellite broadcasting it would be easy to jump in to a conclusion that radio as a medium is losing popularity. But the existing experiences prove otherwise, even in the developed countries, with a wealth of available viewing channels on television, radio has still remained a popular medium. This is because, radio and television serve different functions. Radio being an aural medium has its own advantages.

Among mass media channels, radio is a very popular and powerful communication medium and has proved very effective in helping to disseminate agro-information.

The potentiality of Radio in rural development programmes can be very well seen in the following statement of Wilbur Schramm (1964): "It is not difficult to see why radio should be particularly useful in rural development
programmes. It covers great distances and leaps all kind of natural barriers. It is swift in reaching listeners. It is the cheapest of the major media in production, and reception can also be inexpensive. Now that transistor receivers are widely available, radio communication can be received even where there is no electricity. It is usually effective with literates and illiterates and it lends itself to a great variety of content and forms.

Discussing the importance of farm broadcasting in agricultural extension, Bharadwaj (1968) commented: "Farm broadcasting, through radio, is one of the powerful media of communication. Radio can reach large audience at the same time. In terms of cost, it is an extremely economical medium as compared to other extension media and methods involving individual and group contacts. Radio is considered as a credible source of information and is taken as authentic, trustworthy and prestigious medium of communication."

Status of Radio in India:

The regular broadcasts in India was started at Bombay and Calcutta in the year 1927. These stations were started by the Indian Broadcasting...
At the time of independence in 1947 there were 11 radio stations altogether in the country, six owned by the Government of India and five by the former princely states at Mysore, Baroda, Trivandrum, Hyderabad and Aurangabad (Awasthy 1965). At the end of 1950, AIR network was in a position to serve listeners in all regional languages but the medium wave service reached only 21 per cent of India’s population and 12 per cent of its area (Luthra 1986).

Today there are 95 regional stations and 57 local radio stations. There are 31 Vividh Bharati centers. The number of transmitters, including medium wave, short wave and FM is 257. Medium-wave transmitters cover 96 per cent of the country’s population and 86 per cent of the area.

All India Radio is now the biggest media organization of the Ministry of Information and Broadcasting and its programmes are received by over 10 crore radio receiver sets in India (Anonymous 1994).
Intensive Agricultural programmes and programmes for rural audience in general were commenced by 86 AIR stations including five local stations having a Farm and Home unit in each. The basic thrust in the rural broadcast has been the ways and means for increasing agricultural production and for making healthy living in villages. Special programmes are also broadcast to support the implementation of poverty alleviation programmes for rural women to inform them about their socio-economic welfare, mother and childcare services etc.

During the Eighth Five Year plan, AIR proposed to have a Three-tier system of broadcasting. The network of local radio stations proposed in the Eighth plan will not only offer opportunity for the local community to express its decision but will also enable the national channel to reach a far larger audience than it does now. This will become possible by the spare time of local radio stations being used for recording the programmes of the national channel (Adiseshiah 1993).

Rural broadcasting has been growing in a more impressive way since independence. In 1954, the Government of India decided to help the
State Governments to install community receiving sets by giving subsidies to the extent of 50 percent of their expenditure. This enabled the State Governments to formulate their plans of expansion. Even though the expansion was very impressive with the number of radio sets increased from 9,000 in 1954 to over 13,000 in 1955, the increase during the second plan period was only about 49,800 as compared with the target of 72,000.

Rural programmes generally consist of talks, dialogues and discussions on agriculture, rural health and other problems. Folk music is a dominant feature of the programmes (Kuppuswami 1976).

Rural Forums:

The setting up of Radio Rural Forums in 1956 was an interesting venture jointly sponsored by the Ministry of Information and Broadcasting and UNESCO at Pune from February 19 to April 26. Each Forum comprised 15 to 20 people, and had its own Chairman, and a Convener who acted as the Secretary. The State Government appointed an organizer in each of the five Districts of Maharashtra (Ahmednagar, Kolhapur, Nasik, North Satar and Pune) in which the Forums functioned covering a total of 150 villages. Each programme
was of 30 minutes, on two days of the week related to agriculture and allied subjects. At the end of the programme, the Secretary of the Forum filled in the form regarding attendance, along with comments made and queries raised in the post broadcast discussions with the Chairman, and forwarded these to the District organizer. The replies to the queries given by the experts concerned were read out at a subsequent Forum meeting (Luthra 1986).

Farm and Home Units:

One of the special feature of All India Radio is its' Farm and Home Units, which are engaged in disseminating scientific information about farming to needy people living mostly in poorly accessible villages. The first attempt to introduce agricultural broadcast was made in 1935 at Allahabad. An interesting development later was that in 1965 the Ministry of Information and Broadcasting, in consultation with the Ministry of Agriculture and Education, decided to establish 'Farm and Home Units' at ten AIR stations (Jullundur, Lucknow, Patna, Cuttack, Raipur, Pune, Hyderabad, Bangalore, Tiruchi and Delhi). In order to provide relevant, timely and problem-oriented technical information to farmers of small homogeneous areas with similar agro-economic
conditions. Each such unit works under the administrative control of the Station Director as a part of the overall rural unit. Each unit is headed by a Farm Radio officer who is supported by a Farm Radio Reporter and an Assistant Editor (Script). The Farm Radio Officer and Farm Radio Reporter are generally drawn from amongst the extension personnel of the local areas, and have about ten years of experience in extension activities.

Each unit is provided with ultra-portable tape-recording machines for recording from farmers and extension workers in the field. These recordings are then suitably used in the broadcast programmes. At the AIR headquarters in Delhi, the work of the Farm and Home Unit is coordinated and supervised by the Director Farm and Home who has a Joint Director and a Farm Radio Reporter to assist him. The emphasis in these Farm and Home programmes is on a direct method of presentation, dictated by the need to convey hardcore scientific and technical information and quick timely guidance. Due stress is also laid on soil and water management, social forestry, environmental protection and ecological balance in addition to family welfare, nutrition and eradication of social evils (Luthra 1986).
By and large all stations of AIR have the Farm and Home Unit. The dependence on radio in rural India became more and more especially after the advent of transistor. Villages without power supply could also receive radio signals. That way radio became the people's medium. Radio today, is regarded as the informal school master of the farming class. In fact, they look up to radio for information on various aspects of farming. Further, the farmers regard the radio as a reliable source of information for farming and community development programmes.

The Farm and Home unit of All India Radio in Karnataka State is relaying agriculture programmes through Krishiranga (farm broadcast), Rytarige Salahegalu (hints to farmers) and Farm Radio Lessons (Farm-School-on-the-Air). For the first time Farm Radio Lessons programme was introduced in India during 1975-76. This programme concept was originally formulated by Philippines broadcasters.

In 1973, the Philippines faced an agricultural crisis. The drought, typhoon, floods and plant disease reduced the rice production by half. Rice, the staple food of 45 million Filipinos, was scarce. The fragile Filipino national economy
could not tolerate importing the amounts of rice needed to compensate for this loss in production. Instead, the Philippines launched a national self-help programme, a rice-growing campaign that the country would come to know as "Masagana-99".

"Masagana" means bountiful harvest. The "99" refers to the campaign's goal—99 sacks or 4.3 tons of unmilled rice per hectare.

"Masagana -99" depended on the use of mass communications to promote the campaign as a programme of national survival, and to educate farmers in the new rice technology and credit programme.

Radio was the most effective communication media used to mobilize and educate the Filipino farmers. Seventy four per cent of the Filipino population own radios, and broadcast by radio reaches 85 per cent of the island population. Three out of the four farmers owned a home transistor radio. During the campaign, radio was used in three different ways.

The first application of radio was to promote the programme by winning the farmers' acceptance and cooperation. The second, application of radio was informational rather
than promotional. The third, the use of radio had long-range educational goals. Through the "Farmers University-on-the-Air", 50,000 farmers took short courses and were certified at new levels of agricultural competency. Typically, farmers would listen to the morning broadcasts, read supporting simple print materials and take short tests broadcast over the air. Farm extension agents would often collect their answer sheets and deliver them to the farmcaster, others were sent in by mail. Tests would be graded, commented on, and returned to the farmers. The correct answers were subsequently read over the air and often the names of farmers who made good scores on the tests were announced. Those who successfully completed courses were given certificates at annual graduation ceremonies (Merrick 1981).

The success of this unique programme has attracted the attention of worldwide broadcasters.

In 1973, nine Farm Radio Officers (FROS) were sent to the Philippines by All India Radio for three month study of the Farm-School-on-the-Air programme of radio Philippines and to consider the possibilities of introducing such programmes in India. The officers team which returned from Philippines strongly recommended to start such programmes in India also.
'Farm-School-on-the-Air' (Radio Krushi Pathagalu) was introduced in 1973 at two stations: Trichur and Vijayawada. The results of these early experiments were very encouraging as revealed by the evaluation studies carried out by the Audience Research Unit (ARU) of AIR. Thus, in subsequent years, a few more Farm and Home units namely Bangalore, Coimbatore and Calicut also introduced this programme. (Anonymous 1979)

In Karnataka, a committee of experts drawn from the University of Agricultural Sciences at Hebbal near Bangalore and the Department of Agriculture of Karnataka Government was constituted to suggest the subjects that could be taken up. It was decided to give lessons in paddy cultivation as most of the farmers in the state were engaged in that. A detailed syllabus was worked out encompassing all aspects of paddy cultivation including its history. Experts in various fields were asked to write the lessons for broadcast.

The Farm Radio Lessons were developed into a series of courses on topics selected according to the local needs. After selecting a topic, syllabus for the course is decided after detailed discussions with subject experts, and progressive farmers and development agencies
working in rural areas.

One course generally contains about 15 to 25 lessons and completed in 3 to 4 months. The lessons are devised with the objectives of giving latest information on the subject to the farmers in the regional language.

The Farm-School-on-the-Air Programme consisted of a farmer, an agricultural extension worker and members of the Farm and Home unit of the Bangalore station of All India Radio as students. The expert lectured to them and answered the questions put to him. The entire lesson was recorded and 46 such lessons were broadcast. Farmers were requested to enroll themselves as "students", so that they could take an examination at the end of the course. The response was encouraging; 17,000 farmers enrolled over 10,000 took the examination and the successful ones were suitably rewarded (Jayanna 1979).

The Farm-School-on-the-Air of the Bangalore station of the All India Radio has been a trend-setter in many ways. The variety of programmes that the Farm-School-on-the-Air has organized over the past several years has attracted the attention of the most of the radio stations in the country. The farmers of Karnataka who were the beneficiaries
of the programme are now an improved lot. (The Hindu - 1985).

The "Farm-School-on-the-Air" in its present form introduced for the first time over the Bangalore station has been commended not only by several dignitaries all over the country but also the beneficiaries as well. No station had ever made massive efforts to involve such a large number of agencies, Farmers, Co-operative Banks, Public Sector organizations, fertilizer firms and Departments of the State Government. The purpose of the programme was to organize the farming community and to educate them intensively on the latest scientific practices on crops and vocations by hooking them regularly to the radio programmes on the subject. The "Farm-School-on-the-Air" was appropriately described by intellectuals as "An Open University".

The Farm-School-on-the-Air of the Bangalore station of AIR has managed to carve a niche for itself in the hearts of the farmers of Karnataka, within a short period. It's radio classes have helped them not only to know modern methods of cultivation but also encouraged them to take gainful subsidiary occupations like dairying, sheep rearing, poultry farming and
sericulture. AIR Bangalore has organized more than 40 Farm Radio Lessons programmes (Gundappa 1994).

The Farm-School-on-the-Air programme was conceived to bring together the scientific community and knowledgeable persons on agriculture and allied subjects on the one hand and to take their scientific knowledge adequately to the farming community on the other, which ultimately meant increased production to the country and increased income to the farmers.

The Format of Farm Radio Lessons Programme:

Syllabus:

The actual broadcasting of lessons preceded meticulous planning. The first task was the setting up of an expert committee of scientists of various faculties of the University of Agricultural Sciences and the respective Departments. After careful deliberations the committee evolved the syllabus. Two days in a week were devoted for broadcasting the lessons to the rural people.

Registration:

The next stage was to prepare the farmers for
attentive regular listening. The time table of the lessons was publicized in advance through local announcements, leaflets, press, handouts and through various other field organizations. The farmers were later advised to register their names with the Farm and Home Unit. It was heartening to note that the number of letters reached a staggering 12,000 for Paddy and 22,000 for Dairying. 30,000 for horticulture. To ensure their interest, prizes were announced for those scoring highest marks in the written tests to be conducted at the end of the broadcast of all lessons on each subject.

**Recording:**

Experts prepared the scripts on their respective subjects. Acting as teachers in the studios of All India Radio, these experts started teaching the lessons. A farmer, an extension guide and the qualified staff of the Farm and Home Unit sat in the studios acting as students on behalf of the listening farmers in villages. It was exactly similar to that of a class in the school. The teacher would present the lesson which was followed by discussions and these were pre-recorded programmes in the studios.
In certain cases lessons were recorded in different villages in the presence of invited farmers who also acted as students to represent realities. The lessons thus recorded in the field were later edited and broadcast. The interest was so sustaining that the listeners went on seeking clarifications about their doubts by writing to the Unit which in turn provided answers over AIR.

Books:

After all the lessons were broadcast on the subject, the next stage was to bring out a publication in local language "Kannada" and to supply them free for registered farmers at their doors through the extension workers for their reference. So far 63,000 books on various subjects have been distributed to the registered listeners. Never before such a major task was executed in any station of All India Radio in the country.

Examination:

Thereafter written examinations were conducted and scripts were sent for valuation by experts who had earlier given the lessons. Those who scored high marks were given prizes along with certificates.
Prizes:

The prizes were donated by various banking institutions, public sector organizations, Government departments and progressive farmers. The prizes were bullocks, tyre carts, seed-cum-fertilizer drills, irrigation pump sets, storage bins, poultry birds, transistor radio sets, gobargas plants constructed at the premises of the prize winners, fertilizer, maize sheller, silk sarees, utensils, power sprayers, cauldrons, etc. A conducted tour was also arranged for some of the prize winners in and out of the state free of cost. Never in the past such ideas were built into the programmes in any station of AIR anywhere.

Prize distribution:

At the time of prize distribution various educative programmes were also planned including exhibitions, cattle shows, soil testing programmes, animal health and eye check-up camps, cultural programmes, etc.

The Farm and Home Unit of AIR Bangalore has covered so far several useful subjects which included paddy, dry land farming, dairying (Two series) biogas plant, sugar cane, poultry farming, agricultural marketing, fertilizer, horticultural
crops, small savings etc., under this programme. A second series of dairy lessons had to be broadcast on demand from farmers. In some cases the lessons were dubbed to cassette tapes and sent to farmers training centers (Jayanna 1979), besides a programme on sericulture.

**Statement of the Problem:**

Sericulture, an important agro-based industry plays a predominant role in the economy of rural India. Among the developing countries India ranks the second in raw silk production with a 11,500 metric tones per annum. The share of silk in India's exports is Rs. 675 Crores in 1994 as against a meagre Rs. 7.6 Crores in 1971-72 (The Hindu, 1994).

Today, Karnataka produces nearly 70 per cent of the total Mulberry silk of the country (Anonymous 1993-94). The cultivation of mulberry is spreading to other districts of the Karnataka state. There is lot of scope to extend the sericulture industry thereby improving the socio-economic conditions of the poor people in the rural areas. Karnataka has an ideal climatic condition for silkworm rearing which is an important requirement for the successful harvest of the crop.
Sericulture technology is changing at increasingly faster rate and a well-knit extension network has been established at the national, state and village levels to educate the sericulturists. Inspite of this a wide gap exists between the latest knowledge available and the sericultural practices of farmers.

Considering the above facts and taking into account the significance of sericulture farming in the state of Karnataka, a course on "RESHME KRISHI RADIO PATAGALU" (Farm-School-on-the-Air on Sericulture) was broadcast on the state hook-up between June 15, 1992 to October 12, 1992 by AIR Bangalore. The aim of this programme was to give detailed and timely information to the farmers about the improved method of sericulture cultivation.

To start with farmers were requested to register their names with AIR, Bangalore for listening to and participating in this programme. This was done by repeated announcements on radio, publicity through agricultural journals, newspapers, Sericulture department's extension programmes, meetings, etc. Registration letters were continuously received even after the broadcast of 3-4 lessons. As many as 12,364 farmers
registered for this programme with All India Radio, Bangalore (Gundappa 1993).

The experts committee comprised of experts from the Department of Sericulture and Farm Radio unit of AIR, Bangalore. This committee decided on the topic, name of the programme, duration and frequency of the broadcast, etc. Later, a second committee of subject matter specialists was set up. This included scientists, experts and extension workers who directly or indirectly had been associated with sericulture. This committee decided the number of lessons and the number of experts to deliver the talks. In all, 18 lessons were proposed covering the major aspects of sericulture.

The first lesson was broadcast on June 15 1992. A suitable signature tune was given before and at the end of each lesson. Each lesson was broadcast for 30 minutes from 6.40 P.M. to 7.10 P.M. twice a week on every Monday and Friday. The programme consisted of three participant in each lessons. They were a Farm Radio Reporter (AIR staff) an expert and a farmer or an Extension worker from the Department of Sericulture. Farm Radio Reporter and Farmer or an Extension worker remained same in all the lessons but the experts
continued varying depending upon the lesson. The programme started with a review of previous lesson for five minutes. Then fresh lesson was given by an expert for 15 minutes followed by questions by the farmer and answers by the expert present in the studio. This way it was a talk cum conversation between the expert and the farmer. The Farm Radio Reporter then gave the resume of the information given in the lesson by the expert. This was done in 2-3 minutes.

At the end, when all the 18 lessons were broadcasted an examination for registered farmers was conducted. Questions are read repeatedly with the speed that the listeners could write them on a paper. Registered listeners were requested to send replies to questions to All India Radio, Bangalore by mail. Question paper was setup by the Farm and Home Unit AIR, Bangalore with the help of Department of Sericulture. These were carefully assessed and marks awarded. Farmer's response to the lessons based questions were very good. As many as 5,367 registered farmers replied and 169 farmers including 74 farm women were awarded prizes.

The Department of Sericulture, Government of Karnataka was requested by the All India Radio, Bangalore to offer the prizes. The department of
Sericulture offered 169 Radio sets as prizes for the winners.

The prizes were awarded to the registered farmers on the basis of the marks obtained by them in the written examination. In addition a book about sericulture was given to all the registered farmers (Gundappa 1993). The whole experience generated by the Farm-School-on-the-Air programme on sericulture at All India Radio, Bangalore deserves a closer examination of its reach and impact.

The experience generated by the Farm Radio Lessons programme at All India Radio, Bangalore needs to be assessed considering the aspects like, listening pattern of registered audience, the knowledge gained out of the programme in terms of understanding technological know-how, extent of knowledge utilization, relationship between the knowledge gain and the socio-personal characteristics of the registered audience, the presentation style and their programme preference, besides medium’s credibility to provide much more useful, practical and preferential programmes to the registered audience. The audience research unit of AIR, Bangalore which is an inhome research unit has conducted a survey on selected Farm Radio
Lessons programme mainly with the aim of improving the quality of the broadcast.

It is the time to assess the impact of this broadcasting programme whether the radio still has the same credibility among the farmers, in view of the multi media explosion especially the television.

It is also important to know the perception of the people about the style and method of presentation to keep radio as an important medium among audience in future too.

The Farm Radio Lessons on sericulture programme was selected in view of the following reasons. It was broadcasted in the recent past. Hence, knowledge gained could be possible to assess its objectiveness. It also helps to control extraneous factors which influence on the listeners.

Therefore, it was felt necessary to have an indepth research study on the "Farm-School-on-the-Air" with specific reference to Farm Radio Lessons on Sericulture. Besides, there are not many serious research studies conducted in this area. Hence, with this advantage the present
investigation was carried out with the following objectives:

**Objectives of The Study:**

1. To understand the profiles of the registered farmers of Farm Radio Lessons on sericulture broadcasted by AIR Bangalore.

2. To assess the impact of Farm Radio Lessons programme on knowledge level of registered farmers with respect to Sericulture.

3. To study the relationship if any, between the knowledge gained by the registered farmers of the programme and selected socio-personal characteristics.

4. To assess, the extent to which the information gained through the Farm-Radio Lessons have been put to use among the registered farmers.

5. To identify the type of presentation preferred by the registered farmers.

6. To assess the credibility of radio as a source of information.

7. To examine the opinions and suggestions of the registered farmers about Farm Radio Lessons on sericulture programme.
Significance of the Study:

The findings of this study will help the planners and administrators in the Ministry of Information and Broadcasting as well as the personnel in the Farm and Home Unit of All India Radio in improving the quality of Farm Radio Lessons and similar other Farm Radio programmes. The findings of this study would also be useful to those rural situations where similar socio-economic, psychological and agro-climatic conditions prevail as those of the area under study. The study will also help in preparing a profile of the farmers who get benefit from the programme which will help in making them more relevant and useful.

Limitations of the Study:

The present investigation suffers from the limitations of time, area of study, sample funds and other research facilities usually faced by a student investigator. Limitation of time has particularly limited the numbers of variables to be studied. However, considerable care has been taken to make the study objective and systematic as far
as possible by employing precision in designing the research and analyzing the data.

**Dissertation:**

The dissertation is divided into five chapters. The first chapter introduces the problem of the study. Since this is the first in-depth research on 'Farm-School-on-the-Air' (Farm Radio Lessons) particularly in Karnataka state. An attempt has been made to discuss the importance of the problem and main features of this programme. The specific objectives are given at the end of the first chapter.

The second chapter discusses the review of literature directly or indirectly related with this study.

The third chapter deals with the research methodology. Concepts and measurements of the various dependent and independent variables.

The fourth chapter of the dissertation reports the findings of the research and discussion there of. It includes descriptive as well as relational analyses of the data.

The fifth chapter reports summary of the findings and their implications.